

# ARSG MEETING SUMMARY

AUG. 15, 2013

ATTENDEES: Peter Butler, Steve Fearn, Bill Simon, Rob Robinson, Larry Perino, Kay Zillich, Lisa Richardson, Ray Ferguson, John Ferguson, Kirstin, Brown, Steve Way, Jim Bush

## ANNOUNCEMENTS:

- Durango Herald articles – Starting August 4<sup>th</sup>, there were three days of articles in the Durango Herald about ARSG and its current activities. Several videos were posted on the paper's website including some short interviews and a narration of Kirstin's 3D model.
- Support Letter for SJRC&D – ARSG sent a letter of support for SJRC&D's application to the City of Durango for some funding.
- Update of Good Samaritan video – Tom Schillaci is working away on an update of the Good Samaritan video. He has sent some initial video to Peter for comments.
- International Mine Water Association conference and local tour – Peter attended two days of the conference held at the Colo. School of Mines. There were about 350 attendees from around the world. Around 110 papers were presented on all sorts of technical aspect related to acid mine drainage. Thirty-five of the conference attendees travelled to the upper Animas Basin for a day long tour led by Ray Johnson. Bill Simon spoke to the group at Gladstone and later at dinner in Silverton and said he had some very interesting discussions.
- EPA data maps for May sampling – EPA has provided data maps from its May sampling.

## Updates

1. Technical workgroup update—Innocentive proposal discussion, Avivid discussion – The technical workgroup met in July. The group felt that a Theoretical Challenge requiring more specific information requirements would be more useful. Bill and Peter incorporated comments that were made during the meeting into the challenge and sent it out for review. We are still a ways from our fund raising target, but the money is coming in slowly.

The group also talked by phone with Avivid which has an interesting electro-coagulation process. Avivid said they will get several hundred gallons of mine discharge from some Upper Cement Creek adits for further testing this fall. Depending on results, ARSG may look for funding to do a pilot test next summer on site.

2. Maintenance on past 319 projects – DRMS is contracting to do a number of maintenance projects on different 319 sites. They include maintenance or removal of the diversion ditch above the Hercules, putting talus on the Silver Ledge repository to inhibit erosion, neutralizing a small amount of mine waste at Carbon Lakes and putting it in the Congress shaft, re-vegetating several areas at Carbon Lakes, and doing more characterization work with a small excavator at the Bullion King for next summer's remediation. Overall, its \$180K project.
3. Good Samaritan legislation – Congressman Scott Tipton introduced a bill in the House to provide liability protection for Good Samaritans working on draining mines. The bill is either identical or almost identical to the bill Sen. Udall introduced in the last Congressional session. It would be very helpful to get this bill through the House. That would hopefully make it much easier to pass in the Senate.

4. Wastewater Management Inc. update – Coagulation testing on American Tunnel discharge. Wastewater Management came back to do some more testing. They continued to have equipment problems and haven't come close to testing water for the period specified in the BLM contract.
5. Characterization of Arrastra Gulch – We've kept this item on the agenda because we really need to pull together a report using our existing information this fall. Bill has been pursuing funds for this work.

## **Main Topics**

6. Red & Bonita exploration – Steve Way and Kirstin Brown gave a detailed presentation on exploration of Red & Bonita. Kirstin had a number of great photos from inside the mine. DRMS prepared a map of the workings which was handed out. About 75% of the water comes from the back of the tunnel which is partially collapsed. The rest comes from various drifts. There are no major stopes or raises in the workings examined. About 2700 feet were explored. Although there were impassible collapses at two locations, it is believed, based on some old reports and the amount of dump material at the portal, that there is no more than 3000 feet of workings. Kirstin overlaid the mine map on a satellite photo and on her 3D model which shows that the workings are a long distance from any other known mine workings and do not go under the North Fork of Cement Creek. The workings are also a long distance from what is known as the Bonita Fault fracture zone.

Overall the group was very impressed with handling of the exploration by EPA and its contractors and DRMS. It was a difficult and dangerous project. The group was also impressed with quick turnaround in putting together a presentation two days after the exploration.

7. Long-term Planning – Peter briefly talked about information needed for proposals for adjusting water quality standards in the Upper Animas Basin. He said he was concerned that we may need more information regarding possible sources of metals above A68 (Animas above Cement Creek) in April. Concentrations for manganese, cadmium and to a lesser degree zinc hit a high peak in April. Questions may come up regarding these peaks at a standards hearing, and we need to be prepared with responses. We'll look at existing data and see if there are some gaps. Using some sippers in Animas during this timeframe next year was suggested as a strategy for collecting more data.

A final note: we are planning on a presentation on the use of sugarcane residue as a medium for collecting metals from water for the October meeting. Jim Bush from CH2M Hill is organizing the presentation.

### Potentially For Sept.:

Bullion King update

Innocentive update

Arrastra Gulch